REMARKS

Claims 1-20 are pending. Claims 6-13, 16, and 18-20 were withdrawn from consideration. Claims 1-5, 14-15, and 17 were examined on the merits and were rejected to as detailed below.

1. Election/Restriction

Claims 8-9 and 11 were withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being unreadable on the elected species. Applicants traverse on the ground that claims 8-9 and 11 read on the elected species.

In response to the election of species requirement in the June 21, 2006 Office Action, Applicant elected cadmium sulfide as the single semiconductor film species. Applicant further submitted that claims 1-5, 8-9, 11, 14-15, and 17 were readable upon the elected species.

Claims 1-5, 8-9, 11, 14-15, and 17 all use the transitional term "comprising." The transitional phrase comprising "means that the named elements are essential, but other elements may be added and still form a construct within the scope of the claim." *In re Baxter*, 656 F.2d 686. Because claims 8-9 and 11 use the open transitional phrase "comprising," it does not matter that other elements appear in the claim that do not appear in the elected species. Therefore, Applicants kindly request claim 8-9 and 11 be reinstated.

2. Claim Objections

Claim 1 was objected to as failing to relate the terms "polymer" and "metal" in line 3 with the polymer and metal recited in line 2. This claim has been amended to correct the error and now clarifies the relationship between the polymer and the metal in lines 2 and 3.

Claim 1 was objected to as being unreadable on the elected species because it recites subject matter of a selenium- or tellurium-containing gas. Applicants

traverse on the ground that claim 1 is readable on the elected species for the reasons stated above. Therefore, Applicants kindly request the objection be withdrawn.

Claim 5 was objected to as incorrectly defining the recited solution of the instant invention as organic solvent free. Claim 5 is currently amended to clarify that claim 5 is dependent on claim 2 which is for "an aqueous solution." Therefore, Applicants kindly request the objection be withdrawn.

3. Claim Rejection under 35 USC § 103

Claims 1-3, 14, and 17 were rejected under 35 USC 103(a) as being unpatentable over Negami (Negami et al., US 5,728,231) in view of Anderson (Anderson et al., US 5,494,700), claim 4 was rejected under 35 USC 103(a) as being unpatentable over Negami in view of Anderson further in view of Switzer (US 4,492,811), and claims 5 and 15 were rejected under 35 USC 103(a) as being unpatentable over Negami in view of Anderson further in view of Machin (Machin et al, US 3,353,635). Applicants traverse on the ground that the prior art references do not teach, suggest, or render obvious the claimed process of preparing a semiconductive film.

Claims 1-3, 14, and 17 were rejected under 35 USC 103(a) as being unpatentable over Negami in view of Anderson. Negami teaches a process of preparing a semiconductive film, but does not teach that the metal oxide film can be formed through a solution-based depositing method. Anderson teaches a solution-based depositing method for forming a metal oxide film. The Office argues that the claimed process incorporated Anderson's solution-based depositing method for the solution-processed metal oxide film into the method of Negami.

The Office, however, overlooks a critical difference between Anderson and the claimed solution-based depositing method. Anderson's solution-based

depositing method utilizes a polymerizable organic solvent whereas the claimed process utilizes a soluble polymer as the solute in the solution. Although the difference between a polymerizable organic solvent and a soluble polymer initially appears inconsequential, the ramifications of this difference are significant.

Anderson utilizes a polymerizable organic solvent with ethylene glycol as the preferred solvent. In other words, ethylene glycol is a polymerizable organic solvent. Because ethylene glycol is not a soluble polymer Anderson must incorporate a baking step to polymerize the starting solution. The polymerization of ethylene glycol occurs as a by-product of the heating. Conversely, the claimed process utilizes a "soluble polymer" (*e.g.*, polyethylene glycol and others). Thus, the polymer is in the solution at the very beginning stage and no baking step is required.

In addition, Anderson controls the viscosity of the solution by adjusting the heating time and temperature of the starting solution to form a polymeric precursor. Conversely, the claimed process utilizes functional soluble polymers to control viscosity, and therefore removes the additional heating step. Thus, the claimed process uses a polymer to control viscosity and not an additional heating step.

Further, Anderson does not protect the metal ions from hydrolysis by binding them with functional soluble polymers. Conversely, the claimed process protects the metal ions from hydrolysis by binding them with functional soluble polymers. In other words, the soluble polymer functions as a ligand thereby stabilizing the metal ions from hydrolysis. This is important because many metals (*e.g.*, magnesium, lithium, and titanium) react with water and form other unwanted compounds (*e.g.*, hydro-oxides). Anderson does not provide this functionality because Anderson does not have a functional soluble polymer in the solution (along with water, organic solvent, and pH control agent). Thus, Anderson allows

the metal ions to react with water in the solution before the viscosity can be adjusted.

Because the claimed process utilizes a soluble polymer as the solute in the solution and not a polymerizable organic solvent, the claimed process did not merely incorporate Anderson's solution-based depositing method for the solution-processed metal oxide film into the method of Negami. Moreover, Anderson does not suggest the desirability of substituting a soluble polymer as the solute in the solution for the polymerizable organic solvent. Because the prior art references do not teach or suggest substituting a soluble polymer as a solute in the solution for the polymerizable organic solvent, the prior art references do not render obvious claims 1-3, 14, and 17. Therefore, Applicants kindly request the rejection be withdrawn.

Claim 4 was rejected under 35 USC 103(a) as being unpatentable over Negami in view of Anderson further in view of Switzer (US 4,492,811), and claims 4, 5, and 15 were rejected under 35 USC 103(a) as being unpatentable over Negami in view of Anderson further in view of Machin (Machin et al, US 3,353,635). The additional references of Switzer and Machin, however, do not cure the deficiencies of Anderson. Thus, the combinations as a whole do not render the claims obvious. Thus, Applicants kindly request the rejection be withdrawn.

For convenience, the above remarks generally track the various titled sections of the October 2, 2006 Office Action to which this correspondence is responsive.

Respectfully submitted,

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